

### AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

#### Listing of Claims:

1. - 6. (Canceled)

7. (Currently Amended) A method for improving affinity with a fibrin glue of a polymeric material comprising carbon or silicon as a constitutional element, the polymeric material comprising expanded polytetra-fluoroethylene or silicone, comprising irradiating at least a portion of a surface of the ~~polymeric material~~ expanded polytetra-fluoroethylene or silicone with ions to form an ion-modified ~~polymeric material~~ expanded polytetra-fluoroethylene or silicone; and applying the fibrin glue to the irradiated at least a portion of a surface of the ~~polymeric material~~ expanded polytetra-fluoroethylene or silicone.

8. (Currently Amended) The method according to claim 7 wherein the ion-modified ~~polymeric material~~ expanded polytetra-fluoroethylene or silicone includes a non-irradiated portion and the non-irradiated surface is placed into contact with dura mater.

9. (Currently Amended) The method according to claim 7 wherein the ~~polymeric material~~ expanded polytetra-fluoroethylene or silicone is an artificial dura mater, an artificial blood vessel, a patch for the heart or blood vessel, or a surgical suture.

10. (Currently Amended) The method according to claim 7 wherein the ~~material comprising carbon or silicon as a constitutional element~~ expanded polytetra-fluoroethylene or silicone comprises expanded polytetra-fluoroethylene (ePTFE), ~~polylactic acid, or polyglactin.~~

11. (Currently Amended) The method according to claim 7 wherein the ~~polymeric material~~ expanded polytetra-fluoroethylene or silicone is an artificial dura mater.

12. (Currently Amended) The method according to claim 7 wherein the irradiating at least a portion of a surface of the ~~polymeric material~~ expanded polytetra-fluoroethylene or silicone comprises irradiating with ions at a dose ( $\phi$ ) of  $1 \times 10^{12} \leq \phi \leq 1 \times 10^{16}$  ions/cm<sup>2</sup>.

13. (Currently Amended) The method according to claim 12 wherein the irradiating at least a portion of a surface of the ~~polymeric material~~ expanded polytetra-fluoroethylene or silicone comprises irradiating with ions at a dose ( $\phi$ ) of  $1 \times 10^{13} \leq \phi \leq 1 \times 10^{15}$  ions/cm<sup>2</sup>.

14. (Previously Presented) The method according to claim 12 wherein the ions include H<sup>+</sup>, He<sup>+</sup>, C<sup>+</sup>, N<sup>+</sup>, Ne<sup>+</sup>, Na<sup>+</sup>, N<sub>2</sub><sup>+</sup>, O<sub>2</sub><sup>+</sup>, Ar<sup>+</sup>, Kr<sup>+</sup>, and Xe<sup>+</sup>.

15. (Canceled)

16. (New) The method according to claim 7 wherein the expanded polytetra-fluoroethylene or silicone comprises silicone.

17. (New) The method according to claim 8 wherein the expanded polytetra-fluoroethylene or silicone comprises expanded polytetra-fluoroethylene.

18. (New) The method according to claim 8 wherein the expanded polytetra-fluoroethylene or silicone comprises silicone.

19. (New) The method according to claim 9 wherein the expanded polytetra-fluoroethylene or silicone comprises expanded polytetra-fluoroethylene.

20. (New) The method according to claim 9 wherein the expanded polytetra-fluoroethylene or silicone comprises silicone.

21. (New) The method according to claim 11 wherein the expanded polytetra-fluoroethylene or silicone comprises expanded polytetra-fluoroethylene.

22. (New) The method according to claim 11 wherein the expanded polytetrafluoroethylene or silicone comprises silicone.

23. (New) The method according to claim 12 wherein the expanded polytetrafluoroethylene or silicone comprises expanded polytetrafluoroethylene.

24. (New) The method according to claim 12 wherein the expanded polytetrafluoroethylene or silicone comprises silicone.

25. (New) The method according to claim 13 wherein the expanded polytetrafluoroethylene or silicone comprises expanded polytetrafluoroethylene.

26. (New) The method according to claim 13 wherein the expanded polytetrafluoroethylene or silicone comprises silicone.

27. (New) The method according to claim 14 wherein the expanded polytetrafluoroethylene or silicone comprises expanded polytetrafluoroethylene.